



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/670,869	09/27/2000	Jun Hirai	450100-02731	6828
20999	7590	08/09/2005	EXAMINER	
FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			WANG, TED M	
			ART UNIT	PAPER NUMBER
			2634	

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/670,869	Applicant(s) HIRAI, JUN	
	Examiner Ted M. Wang	Art Unit 2634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 June 2005.  
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,5-8,10,11 and 13 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-3,5-8,10,11 and 13 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☒ The drawing(s) filed on 08/26/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☒ All b) ☐ Some \* c) ☐ None of:  
 1. ☒ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, filed 6/27/2005, with respect to the rejection(s) of claim(s) 1-3, 5-8, 10, 11, and 13 under 35 USC § 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of US 5,799,081 and US 6,366,731.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michener et al. (US 6,323,909) in view of Kim et al. (US 5,799,081) and Na et al. (US 6,366,731).

- With regard claim 1, Michener et al. discloses a signal a system and method for distributing high definition television (HDTV) and standard definition television (SDTV) signals via satellite for receiving a digital satellite broadcasting signal containing at least one of a first broadcast signal in a first format and a second

broadcast signal in a second format (Fig.4 and 5, column 2 lines 24-67, column 3 lines 23-50, and column 7 lines 10-45), comprising:

signal receiving means for receiving said digital satellite broadcasting signal (Fig.1, 4, and 5, and column 3 lines 51-65, and column 7 lines 10-20); judging means for judging whether said digital satellite broadcasting signal received by said signal receiving means is in the first broadcast signal format or in the second broadcast signal format (Fig.4 and 5, and column 7 lines 21); for converting the data structure of the second broadcast signal if it is determined by the judging means that the digital satellite broadcast signal is in said second format to generate a third broadcast signal (Fig.4 and 5 elements 345 and 350, and column 7 line 10 – column 8 line 67); and second output means for outputting the third broadcast signal generated in said conversion means from a digital interface (Fig.5 elements 345 and 350, and column 7 line 10-60).

Michener et al. discloses all of the subject matter as describer in the above paragraph except for specifically teaching that

- a) add an analog signal to the analog signal for suppressing copying of the analog signal; and
- b) output the first output means the analog signal generated in said generating means from an analog interface; and
- c) convert the data structure of the second broadcast signal includes rearranging a timestamp and a packet length of a transport stream of the second broadcast signal.

With regard a), Kim et al. teaches a copy control for a video signal with copyright signals for generating an analog signal and adding to the analog signal for suppressing copying of the analog signal (Fig.1 —4 and column n1 line 20 – column 3 line 62). It is desirable to add an analog signal to the analog signal for suppressing copying of the analog signal in order to prevent the unauthorized copy of a video program (column 2 lines 41-67).

With regard b), Kim et al. further teaches a integrated receiver decoder with the first output means for outputting the analog signal generated in said generating means from an analog interface (Fig.4 element 34 output and column 4 lines 41-67). It is desirable to have an integrated receiver decoder with the first output means for outputting the analog signal generated in said generating means from an analog interface in order to improve the connectivity of the external devices, such as analog TV, VCR, ...etc.

With regard c), Michener et al. discloses a transport multiplexing to rearrange the transport stream of the HD broadcast signal (which is MPEG-encoded) to a transport stream define in IEEE1394 (the structure conformed with the ATSC system) but fails to specify how to rearrange the data structure from one to another.

However, Na et al. teaches converting the data structure of the second broadcast signal includes rearranging a timestamp and a packet length of a transport stream of the second broadcast signal (column 7 lines 3-67).

It is desirable converting the data structure of the second broadcast signal includes rearranging a timestamp and a packet length of a transport stream of the second broadcast signal in order to improve the data transferring performance between two different standards or data structures.

Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention was made to include the apparatus as taught by Kim et al. and Na et al. in which, add an analog signal to the analog signal for suppressing copying of the analog signal; and output the first output means the analog signal generated in said generating means from an analog interface; and convert the data structure of the second broadcast signal includes rearranging a timestamp and a packet length of a transport stream of the second broadcast signal, into Micheners' receiver so as to prevent the unauthorized copy of a video program, improve the connectivity of the external devices, and improve the data transferring performance between two different standards or data structures, respectively.

- In regard claim 2, the limitation that the digital satellite broadcasting signal is DSS (Direct Satellite System) broadcast signal, the first broadcast signal is an SD (Standard Definition) broadcast signal and the second broadcast signal is an HD (High Definition) broadcast signal can further be taught by Michener et al. in column 1 lines 42-64, where DirecTV system is a DSS (Direct Satellite System), and Fig.4 and 5, column 2 lines 24-67, column 3 lines 23-50, and column 7 lines 10-45, respectively.

Art Unit: 2634

- With regard claim 3, the limitation that digital interface is IEEE 1394 interface can further be taught by Michener et al. in Fig.5 elements 345 and 350, and column 7 line 10-60.
- With regard claim 6, which is an apparatus claim related to claim 1, all limitation is contained in claim 1. The explanation of all the limitation is already addressed in the above paragraph.
- With regard claim 7, which is an apparatus claim related to claim 2, all limitation is contained in claim 2. The explanation of all the limitation is already addressed in the above paragraph.
- With regard claim 8, which is an apparatus claim related to claim 3, all limitation is contained in claim 3. The explanation of all the limitation is already addressed in the above paragraph.

4. Claims 5, 10, 11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michener et al. (US 6,323,909) and Kim et al. (US 5,799,081) and Na et al. (US 6,366,731) as applied above to claims 1 and 6, and further in view of Okuyama et al. (US 5,987,126).

- With regard claim 5, Michener et al. and Kim et al. and Na et al. disclose all the subject matter as described in the above paragraph except for specifically teaching that an encrypting circuit is included for encrypting the third broadcast signal.

However, Okuyama et al. teaches an encrypting circuit for encrypting the third broadcast signal (Fig.16 element 207 and column 19 line 57 – column 20 line 6).

Art Unit: 2634

It is desired to include an encrypting circuit for encrypting the third broadcast signal in order to further enhance the copyright protection (column 19 lines 45-67). Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention was made to include the apparatus/method as taught by Okuyama et al. in which, an encrypting circuit for encrypting the third broadcast signal, into Michener et al. and Kim et al. and Nas' IEEE1394 interface circuit so as to further enhance the copyright protection.

- With regard claim 10, which is an apparatus claim related to claim 5, all limitation is contained in claim 5. The explanation of all the limitation is already addressed in the above paragraph.
- With regard claim 11, Michener et al. and Kim et al. and Nas et al. discloses all of the subject matter as described above except for specifically teaching that a recording medium recorded with a program which is readable by a computer and serves to process digital satellite broadcasting signal received.

However, Okuyama et al. further teaches that the method and apparatus for device having a digital interface and a network system using such a device and a copy protection method can be implemented in software stored in a computer-readable medium. The computer-readable medium is an electronic, magnetic, optical, or other physical device or means that can be contain or store a computer program for use by or in connection with a computer-related system or method (column 22 lines 23-30 and Fig. 30 element 113). One skilled in the art would have clearly recognized that the method of "Michener et al. and Kim et al.



and Nas et al.” would have been implemented in a software. The implemented software would perform same function of the hardware for less expense, adaptability, and flexibility. Therefore, it would have been obvious to have used the software in “Michener et al. and Kim et al. and Nas et al.” as taught by Okuyama et al. in order to reduce cost and improve the adaptability and flexibility of the communication system.

- With regard claim 13, which is a recording medium recorded claim related to claim 10, all limitation is contained in claim 10. The explanation of all the limitation is already addressed in the above paragraph.

### ***Conclusion***


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ted M. Wang whose telephone number is 571-272-3053. The examiner can normally be reached on M-F, 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 571-272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ted M Wang  
Examiner  
Art Unit 2634

Ted M. Wang



**STEPHEN CHIN**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**